Network Working Group
Request for Comments #66

S. Crocker
UCLA
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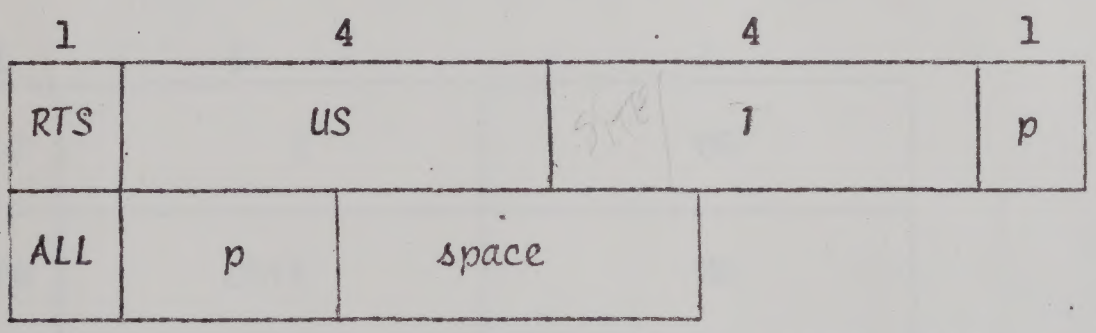
3rd Level Ideas and other Noise

On 12 August 70, I met at BBN with representatives from BBN and MIT and we discussed third level protocol.

Dial-up The following proposed dial-up protocol was agreed upon at the meeting.

The purpose of this piece of protocol is to get a process at one site (hereafter the using site) in contact with the logger at the other site (hereafter the serving site).

To initiate contact, the using process attaches a receive socket *us* and requests connection to socket 1 in the serving host. The using NCP thus sends



over link 1, where *us* is the user's receive socket, *p* is the link, and *space* is some nominal space allocation.

The serving Host may decide to refuse contact, in which case it will respond with the standard CLS. If it accepts contact, however, it will send exactly an even 32 bit number over the connection and close the connection. This even 32 bit number is the name of a receive socket in the serving Host. This socket and the next higher numbered socket are

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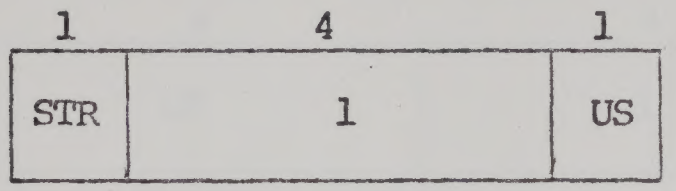
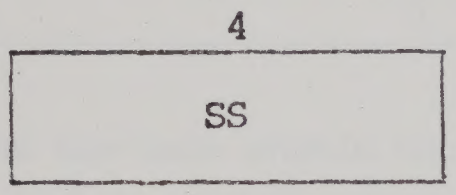
reserved for contact with the user. Thus the serving NCP sends

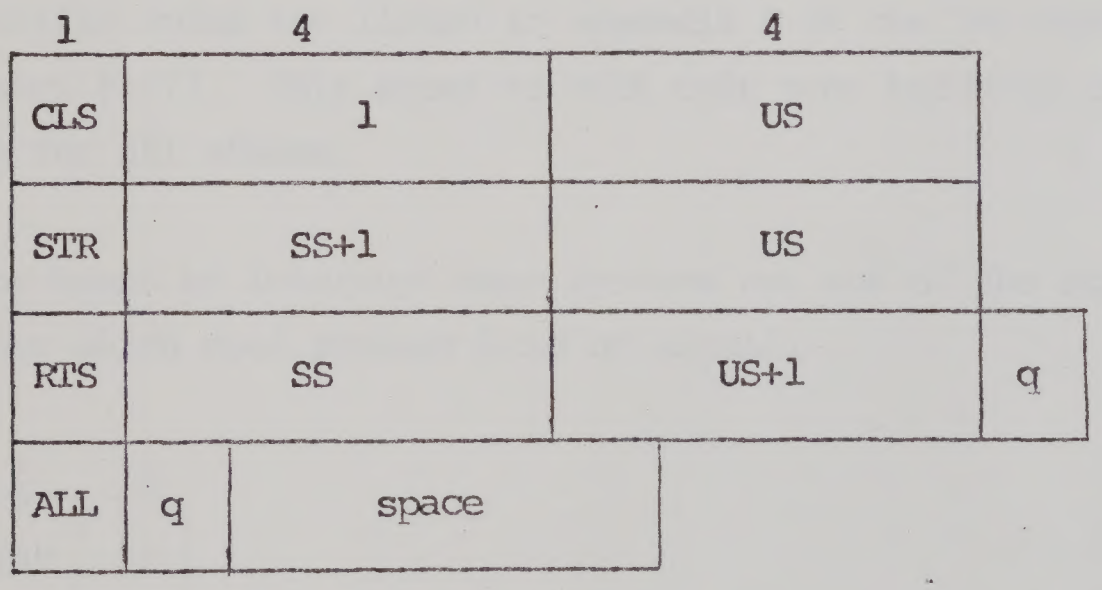


on link 1, followed by



on link p. Note that SS must be even.

After sending the server socket number, SS, the NCP sends



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The using Host also sets up these connections by sending

1	4	4	
CLS	US	1	
STR	US+1	SS	
RTS	US	SS+1	r

At this point the user should be connected to the logger at the serving site.

Standard Console

We next agreed on an initial network standard console: 7-bit ASCII in 8 bit fields with the eighth bit on, transmitted in contiguous streams. The specific codes are listed in appendix H of the IMP Operations manual, BBN report #1877. This seems to work only some hardship on PDP-10's and be fine for all others.

For break or interrupt many systems use one of the standard characters; for those which need another kind of signal,

1	1
INR	r

sent over the control link should suffice.